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NEWS OF SOVIET MEDICAL SCIENCE

AND APPLICATIONS OF SCIENCE TO MEDICINE  
The Soviet Union is making rapid progress in the field of medicine and the application of science to medicine. This is reflected in the many achievements of Soviet medical science and the many applications of science to medicine. The Soviet Union is making rapid progress in the field of medicine and the application of science to medicine. This is reflected in the many achievements of Soviet medical science and the many applications of science to medicine.

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# FOREWORD

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# NEWS OF SOVIET MEDICAL SCIENCE

Following are translations of two articles taken from the Russian-language periodical Arkhiv anatomii, gistologii i embriologii (Archives of Anatomy, Histology, and Embryology), Moscow-Leningrad, Vol. XXXVIII, No. 1, January 1960. Source data on the individual articles (page numbers, authors) are given below.

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I. PLENARY SESSION OF THE SCIENTIFIC MEDICAL COUNCIL  
OF THE MINISTRY OF HEALTH RSFSR

Pages 123-124

Prof. V. G. Yeliseyev

A plenum of the Scientific Medical Council of the Ministry of Health RSFSR was held in Moscow on 17 and 18 February 1959.

Participating in the work of the plenum were leading workers of the directing organs--the Ministries of Health USSR and RSFSR, and the AMN [Academy of Medical Sciences] USSR.

In the organizational section of the plenum a report was delivered by Prof. N. A. Vinogradov, chairman of the Scientific Medical Council: "On the Seven-Year Scientific-Research Plan of the Public Health Establishments of the RSFSR (1959-1965), and the Means for its Accomplishment."

In the resolution adopted on Prof. N. A. Vinogradov's report, the plenum approved the seven-year problem-and-theme plan (1959-1965) concerning the scientific research work of the public health establishments of the RSFSR.

Heard and discussed in the scientific section of the plenum were the reports of Prof. V. G. Yeliseyev (Moscow)--"Connective Tissue and Its Role in the Physiological and Pathological Reactions of the Organism"; Prof. P. V. Makarov (Leningrad), corresponding member of the AMN USSR--"Some Problems of Cell Investigation"; as well as a series of reports on the problem of leukemia (I. A. Kassirskiy, A. F. Tur, and others).

It was proposed that each scientific establishment cooperate in working out a limited number of problems of current importance as regards theory and practice in the public health service with a view to putting a definite end to the multiplicity of problems and themes. The plenum recommended the following: for the purpose of accelerating the solution of the most pressing problems of contemporary medicine, wider use of the practice of setting up laboratories (reinforcement groups) under the individual departments of higher medical training institutions, providing them with cadres and equipment, scientific services, literature, etc.; examination of the questions of combining individual departments of the higher medical training institutions and scientific research institutes, of organizing institutes of hematology in Siberia, and of setting up institutes of therapy, surgery, and sanitary enlightenment in the RSFSR; working out measures for intensifying the role and responsibility of scientific councils and heads of medical and scientific research institutes (directors and their deputies) in the planning and organization of scientific research; adopting without delay measures to strengthen the departments of physics and chemistry by means of scientific cadres and equipment.

Within the framework of scientific-research (especially clinical) and medical institutes, theoretical laboratories (physiology, morphology, physics, chemistry, etc.) should be fully represented. The structure of institutes should be changed in accordance with the advances of science and with the tasks which arise in public health activities.

The plenum also recommended coordinating the scientific research between the scientific-research institutions within individual cities (scientific research institute, higher medical training institution, institute for the advanced training of physicians, universities, etc.), placing the primary responsibility therefor on the medical institute.

Also recommended: for the purpose of eliminating parallelism and ensuring the coordination of scientific research, requiring all medical journals to inform the public more fully concerning the thematics of work in progress; disseminating the reports of scientific institutions; providing for the publication on a wider scale of bibliographies, information letters, and bulletins.

Considering obligatory the publication of collections of the works of all-Russian medical congresses and conferences. Carrying out on a wider scale the publication of collections of works on various subjects by the public health establishments, giving special attention to the quality thereof.

Simplifying the existing government system of reports on scientific-research work. Creating, in the course of the next 2-3 years, the necessary conditions for a transition to the evaluation of the scientific activities of institutes according to their printed works and research put into practice. Introducing into the practice the reports for the last 5-10 years of the work of institutes, departments, sections, laboratories, and individual scientists in scientific societies and in the scientific councils of institutes.

The Scientific Medical Council of the Ministry of Health RSFSR is to prepare by 1 April of each year on the basis of reports from institutes a plan of practical measures for the introduction into the public health practice of the scientific achievements of the previous year. The presence or absence in the reports of scientific research and medical institutes of recommendations for introduction into the practice is to be considered one of the basic criteria for the evaluation of the activities of these institutes and their directors.

The plenum recommended paying special attention in the forthcoming seven-year period to strengthening the scientific research institutes and public health establishments of the RSFSR by means of highly skilled cadres.

Also recommended: in connection with the tasks of science and practical public health work, considering the possible reorganization of individual scientific research institutes, or combining them with the cadres of medical institutes.

Making wider use of means for the encouragement of talented young scientists; noting in the press each year the best scientific works; making wider use of foreign assignments as a means of encouraging the most active and promising scientists.

The plenum of the Scientific Medical Council resolved to include in the seven-year problem-and-theme plan for the scientific research of the public health institutions of the RSFSR problems of theoretical medicine, including problems of morphology.

It recommended the following as prospective future subjects in the study of connective tissue: the electron-microscopic, histochemical, and radio-autographic investigation of collagenic, elastic, and reticular fibers and the basal substance in the normal state, under various experimental conditions, and under pathological conditions; cellular forms of connective tissue, their role in the physiological and pathological reactions of the organism; the influence of the nervous system on the reactions of connective tissue; neural-hormone regulation of the inflammatory reaction; the problem of the permeability of vessels and membranes; the vascular system and heart in the light of the problems of connective tissue.

With a view to further strengthening scientific research and medical-prophylactic work in the public health institutions of the RSFSR concerning the problem of leukemia, the plenum resolved to devote special attention to the study of the etiological role of ionized radiation; to conduct clinical and experimental investigations concerning the etiological role of various chemical factors, including occupational, and also concerning the etiological role of viruses; to consider it advisable to set up experimental laboratories in the scientific-research institutes of hematology and blood transfusion, as well as in the institutes of oncology, for the purpose of investigating the etiology and pathogenesis of leukemia.

Further resolved: Concerning questions of the clinical picture, prophylaxis, and treatment of leukemia, to recommend the development of effective measures assuring the safety of the personnel of X-ray and radiological institutions, reexamining the permissible limits of exposure to radiation with a view to reducing them to the maximum extent possible; to recommend the organization of careful clinical examination of personnel working with radiation; to consider advisable the organization in the clinics of medical institutes and in major hospitals of special hematological departments (wards) headed by doctors with special training in hematology; to intensify work aimed at the discovery of new chemical-therapeutic substances with specific cytostatic effect, the creation of new Soviet cortico-steroid preparations, the discovery of cytostatic antibiotics and antileukemic serums; to consider it necessary to set up the mass production of antileukemic agents; to speed up the publication of instructions for the treatment of leukemia among children.

II. RESOLUTIONS OF THE PLENUM OF THE BOARD OF THE ALL-UNION  
SCIENTIFIC SOCIETY OF ANATOMISTS, HISTOLOGISTS, AND  
EMBRYOLOGISTS (Moscow, 20-22 June 1959)

Pages 124-127

Unsigned article

A review of the work of the plenum of the board of the VNOAGE [All-Union Scientific Society of Anatomists, Hematologists, and Embryologists] will be published in the next issue of the present journal.)

RESOLUTION

on the question "On the Plan for and Coordination of Scientific Investigations in the Field of Morphology 1959-1965"

The XXI Congress of the CPSU has given the country a grandiose plan for the development of the national economy of the USSR in the next seven years--a plan for the building of Communism.

Soviet science, like all other branches of the Soviet economy, is planned and connected with the tasks entailed in the practical work of building Communism. The All-Union Scientific Society (AGE) must give many-sided assistance to the organizations which plan medical and biological science.

The reports delivered (by D. A. Zhdanov, V. G. Kas'yanenko, Bogolyubskiy, V. G. Yeliseyev, T. A. Grigor'eva) described the situation in the scientific research institutes and departments, and pointed out shortcomings in the organization of scientific planning from the point of view of the necessity for uniting the efforts of scientific workers around the most pressing problems.

Among these shortcomings are the poor development of a number of urgent questions, such as those of comparative anatomy, human and experimental embryology; the poor concentration of the attention of scientists along the main theoretical lines; inadequate utilization of modern technical methods; absence of the necessary liaison, which frequently results in parallelism in scientific work.

It was justifiably pointed out in the reports that insufficient research is being done on microscopic anatomy, on the histology of agricultural and commercial animals; there is inadequate study of the functional morphology of the sense organs. Research is also inadequate on the anatomy and constitution of various age groups, on changes in the body structure of man resulting from occupational and sports activities. Attention should be given to the mosaic problematics of some departments.

Scientific research work on comparative anatomy is in a critical state in most universities, due to the absence of independent laboratories under the zoological departments and their limited staffs. Anthropology is still not being given sufficient attention in the universities and medical institutes.

It has been pointed out that some collections of works published in oblast capitals fail to meet the requirements set for scientific publications.

The plenum of the administration of VNOAGE resolves:

1. To instruct the Presidium to begin work to correct the shortcomings mentioned above in planning research in the field of morphology.
2. To urge the VNOAGE to take part in compiling monographs and manuals on the most pressing questions of modern science. To intensify the struggle against foreign influences and false concepts in morphology.
3. To request the AMN USSR to inform its members regularly concerning the scientific work being done in the departments and scientific research institutes through the preparation of combined annual problem-and-theme plans according to problems No. 3 and 4 of the AMN USSR.
4. To urge the presidium of the board of the VNOAGE to organize various forms of exchange of experience (brief and long-term assignments; attachments to various working places; courses in new technology; consultations on scientific investigations; symposia, conferences).
5. With a view to applying more rapidly, efficiently, and successfully the new technology, to petition the republic Ministries of Health as regards organizing scientific-research laboratories in the various departments.
6. To intensify the complex of scientific investigations with the departments of physiology, biochemistry, and pathological anatomy.
7. To urge the departments of the VNOAGE to intensify their work in coordinating the plans of scientific research laboratories and departments working on related problems.
8. With a view to strengthening work in the field of comparative morphology, to petition the Ministry of Higher Education to set up departments of comparative anatomy and animal evolution in the major universities and, in other universities, laboratories for comparative anatomy under the department of zoology. To press the petition for the re-establishment of the Gold Medal imeni A. N. Severtsov for the best work in comparative morphology.
9. To bring to light the intolerable backwardness of scientific research work in the field of human embryology and comparative embryology, and to take measures to change the existing state of affairs.
10. To improve in the departments of anatomy the study of questions of constitution.
11. To guide the study of the morphology of agricultural animals in the direction of investigating the structure and development of the bodies of animals with the highest productivity and breeding capacities, as well as problems of domestication. To intensify study of questions of histology in the veterinary and zoological higher educational institutions.
12. To provide for review of the works published in monthly collections.
13. To petition the Academy of Agricultural Sciences regarding measures for the coordination of morphological research.



14. To create an interdepartmental commission on reagents and dyes, and also one on approval of them, for purposes of morphological research on the reagents and dyes put out by different organizations and for various national economic purposes.

#### RESOLUTION

on the reports of M. G. Prives, A. G. Knorre, and S. I. Shchelkunov: "On the Teaching of Anatomy, Histology, and Embryology in the Higher Medical School in the Light of the Law of the Supreme Soviet USSR on Strengthening Ties Between School and Life and on the Further Development of Education in the USSR"

In the last 2 years, as a result of the change in the admission requirements of the higher educational institutions, matriculants are being admitted who have had experience in life and who are more adapted to independent and purposeful work. In this connection possibilities have come to light for improving instruction. A whole series of higher medical educational institutions have accumulated positive experience in organizing the active work of the students. Eliminated to a considerable degree have been academic methods of instruction, student "cramming," petty guardianship over them. However, in the light of the new requirements of the law of the Supreme Soviet concerning relating of school to life, the measures which have been carried out thus far have been inadequate. Further improvement is required in the educational process, as is an increase in the students knowledge of morphology.

The plenum of the VNOAGE, having heard and discussed reports and speeches at debates, considers it necessary to take the following steps:

(1) to assure that lectures and practical activities in anatomy and histology be regulated by firm instructions for each academic group. To carry out activities with the subgroups efficiently with a view to organizing more independent work on the part of the students, with opportunities being provided for each student to finish assignments within shorter periods of time and to take examinations sooner;

(2) to assure that practical activities in anatomy and histology be carried out independently by the students. To eliminate the daily quizzing of students on assignments, and to exercise control over the major practical divisions of courses;

(3) to allow students to schedule the times they will take the required examinations;

(4) to re-establish examinations or differentiating tests in anatomy at the end of the first semester, and in histology at the end of the second semester;

(5) to increase requirements as regards knowledge of anatomy and histology on the part of the students, eliminating all "liberalism" in tests and examinations;

(6) to study the experience in organizing practical activities in anatomy according to the free choice of the students without academic groups;

(7) to extend the anatomy course through the first three semesters for day faculties and four for evening;

(8) to schedule the study of all divisions of anatomy so as not to prolong it beyond regular school hours; to expand, outside of the scheduled hours, independent work on the part of the students in the school museums and department halls;

(9) to make wider use of the X-ray method in teaching human anatomy;

(10) to assure that all histology departments arrange to have students frequently make microscopic slides of human tissues and organs and macro- and micropreparations for the study of embryology;

(11) to re-examine the anatomy and histology programs for evening students;

(12) to assure that the "Meduchposobiye" Trust prepares teaching materials of higher quality;

(13) to consider it necessary to put out a series of educational films on anatomy and histology for the higher medical educational institutions, particularly the film "Conduction Paths of the Brain and Spinal Cord," the script for which has been prepared by I. D. Lev in the Department of Normal Anatomy of the Military-Medical Academy imeni S. M. Kirov;

(14) to contact the Ministry of Health concerning speedy adjustment of the system of obtaining corpses from hospitals and other medical-prophylactic establishments;

(15) to draw the attention of the Ministry of Health USSR to the necessity for producing containers for specimens in anatomical museums. To introduce into instruction the preparation of certain anatomical preparations, in particular dried elastic fibers, according to the method devised by the Department of Normal Anatomy of the First Leningrad Medical Institute;

(16) to increase the ideological and scientific level of textbooks on anatomy and histology for medical and stomatological institutes;

(17) to assure that the teaching of anatomy and histology in universities and in veterinary, agricultural, and zootechnical institutes be discussed at one of the plenums of the board of the VNOAGE;

(18) to consider desirable the introduction of faculty courses in anatomy, histology, and embryology for upper-class students;

(19) to develop the work of student scientific circles in the departments of anatomy and histology, drawing from among the members cadres of research students;

(20) to work for the further improvement of the teaching process in the departments of normal anatomy and histology.

The plenum of the VNOAGE recommends that the republic and oblast societies of anatomists, histologists, and embryologists discuss this resolution at their meetings and put it into effect in the work of the departments of anatomy and histology of the medical and stomatological institutes.

## RESOLUTION

on the work and tasks of the journal Arkhib anatomii, gistologii i embriologii in the light of the decisions of the XXI Congress of the CPSU

Having heard and discussed the report of B. A. Dolgo-Saburov on the work of the journal Arkhib anatomii, gistologii i embriologii, the plenum of the board of the VNOAGE notes with satisfaction that at present the morphologists of our country possess an authoritative scientific organ which expresses with basic correctness the results of the scientific research being done in the USSR. In recent years there has been a noticeable increase in the quality of the materials published, illustrations have been improved, and the content of the journal has become more varied. The editorial board is doing a great deal of organizational work in securing articles, book reviews, etc., for publication, drawing into this work a large group of authors from the various higher medical training institutions and scientific establishments.

The comparatively small number of reports published on the work carried out according to the latest research methods can be traced to the fact that some scientific groups and their directors at times confine themselves to verbal communications or send their articles to other journals. The provision of articles of high quality for the various sections of the journal for 12 issues a year should be an honorable task for all heads of morphological departments and laboratories.

It is necessary to increase the number of subscribers to the journal. All members of the society should be subscribers.

Deserving of approval is the work of the editorial board with authors, including consultative aid, by means of the detailed reviewing of articles, hearing authors communications at meetings of the editorial board or scientific society (with demonstrations of preparations), etc.

It is desirable that the journal provide subscribers with supplements in the form of thematic collections or new monographs at reduced prices.

The plenum considers it necessary to increase the number of critical surveys of foreign journals, to publish surveys of the researches of departments and scientific groups, to publish materials on the history of morphological departments, to participate in the publication of materials on the work of student scientific societies.

Recognizing as correct and completely satisfactory the activities of the editorial board in the conduct of the journal Arkhib anatomii, gistologii i embriologii, the plenum of the board of the VNOAGE calls on all the members of the society to take an energetic part in the work of this organ.